

a matter of opinion, but they afterwards state: "But whatever view may be held on this ground, Mr. Regan's contention does not hold in the case under consideration. *Cyclopium* is not the genitive plural of *Cyclops*, as he imagines, but the neuter form of the adjective *cyclopius*." I do not know what reasons Messrs. Evermann and Kendall may have for this assertion, but Swainson's \* own words, as quoted by me (and not as misquoted by them), seem to establish beyond any doubt that he merely took the specific name, without alteration, and used it for his new genus.

The statement that I object to the family name Argiidae of Gill is hardly correct. On the contrary, I should consider it a most excellent name for the group if it is to be regarded as a distinct family. Provided that they be correctly defined and their relations made clear, it appears to me to be a point of comparatively small importance whether the Argiinae or Argiidae be regarded as a specialized group of Loricariidae or as a distinct family. I am inclined to believe, however, that the practice of making every somewhat abnormal or peculiar genus the type of a family tends to obscure its relationships.

LXX.—*On some Oriental Aphodiid Coleoptera of the Rhyparus Group, with Description of a new Genus.* By GILBERT J. ARROW.

THE British Museum having recently received from Mr. George Lewis a very remarkable minute beetle having no close ally among known genera, I have founded for it a new genus which can only be associated with *Rhyparus*. In the course of studying its affinities I have made a few notes upon certain other species of this peculiar group which I publish at the same time.

STEREOMERA, gen. nov.

Corpus breviter rectangulum, depressum; caput magnum, clypeo late arenato; antennae 9-articulatae, articulo primo longo, lunato, in fossa profunde volvente, secundo breviter cylindrico, tertio fere ad tria sequentes conjuncta aequale, his inter se aequalibus, tribus ultimis clavam brevem formantibus; palpi maxillares longi, graciles; oculi elongati; coxae anteriores quatuor laminibus

\* Swainson, of course, misquoted Humboldt, substituting *Pimelodus cyclopium* for *Pimelodus cyclopius*.

angustis separatae, posticae contiguæ, prosterno antico et postico valde producto; pedes omnes breves, tibiis sine dentibus vel carinis, tarsis omnibus 3-articulatis, articulis brevibus, crassis; elytrorum epipleuræ latæ; abdomen valde contractum, segmenta in medio solidati; pygidium ventrale.

*Stereomera pusilla*, sp. n.

Lata, valde depressa, rufo-picea; capite lato, plano, prothoracis atque elytrorum lateribus exacte coadaptatis, fere rectis et parallelis; prothoraco antice leviter angustato, angulis omnibus acutis, parte mediana antice et postice valde elevata ibique breviter longitudinaliter costata, margine postico valde sinuato; clytris brevibus, epipleuris latis, lateribus parteque postica abrupte verticalibus, singulo clytro costis tribus internis pluribusque transversis ornato.

Long. 2.5 mm.

*Hab.* SINGAPORE.

A single specimen of this minute beetle, found by M. Raffray in November 1889, has been kindly given to the National Collection by Mr. George Lewis. Although having no superficial resemblance to any other genus of Aphodiidæ, such of its structural features as are not entirely peculiar point clearly, in my opinion, to a place in that family. The 3-jointed tarsi, much-reduced abdomen, and the form of the thorax and elytra isolate it from all known genera, but in its general anatomy it shows many points of relationship with *Rhyparus*.

The head is large and unarmed, the thorax short and broad, with a deep transverse furrow about the middle which interrupts a series of longitudinal costæ continuous with similar costæ upon the elytra. These are also obliterated in front of the scutellum by a sharply elevated boss. The elytra exactly fit against the prothorax behind, and at two thirds of their length become rather abruptly perpendicular. The sides are also abruptly perpendicular, and broad folds wrap the abdomen beneath, the elytra being immovable and the suture entirely obliterated. There are three longitudinal costæ on each side in addition to the lateral carina, and the last interval is about twice the width of the others. The intervals are crossed by fine transverse ridges, which produce a reticulated appearance. The angles formed by the lateral carinæ at the declivity are somewhat turned inwards.

The head in the contracted position fits against the front femora, entirely enclosing the eyes and antennæ, the latter fitting into deep fossæ in the lower face of the clypeus. There is a very long and slender anterior prosternal process

and a rather long tapering postcoxal process. The middle coxæ are separated by a thin lamina and the hind coxæ are contiguous. Between middle and hind coxæ the metasternum is raised, forming a trapezoidal area. The pygidium is completely ventral, and between it and the metasternum only two ventral segments are distinguishable in the middle, but five or six immovably united can be counted at the sides. The ventral surface is coarsely punctured.

The most remarkable feature of all is found in the tarsi of three joints only, any less number than the coleopterous maximum of five being of extreme rarity among the Lamellicornia. Another abnormal genus of Aphodiidæ (*Phycochus*) has, however, tarsi of only two visible joints. The articulations in *Stereomera* are very close, and can allow very little, if any, movement. Similarly modified tarsi are found in a few Cetoniidæ (*Trichoplus* and *Callinomes*) living in ants' nests. *Stereomera* has in all probability the same habit, for the domestic animals of ants, like those of man, are great violators of the proprieties of systematics.

Although the species of this little group first described was placed by Westwood among the Aphodiidæ, subsequent writers—Harold and Fairmaire—have treated them as Copridæ. There is no justification for this view except Pascoe's inaccurate description of one of the species, called by him *Antrisis Saundersi*, although congeneric with *Rhypparus*, Westwood, and, I believe, identical with the later-described *R. approximans*, Fairmaire. Pascoe described the hind coxæ as widely separated, being evidently deceived by the separation of the femora, which are inserted at a distance from the tips of the coxæ, the latter being really contiguous. Mistaking the inturned pygidium for a ventral segment, he called the abdomen six-jointed, whereas there are only five joints. His figure is also misleading, representing the insect as much too short. In my opinion these forms constitute a link between the Aphodiidæ and Trogidæ. The abdomen of five visible segments, the simple legs without teeth or spines, and the conformation and sculpture of the surface connect them with the Trogidæ, the dilatation of the clypeus, the prominence of the abdomen, the position of the pygidium, &c., exclude them from that family, and the closely approximated coxæ and 9-jointed antennæ are features common to both those families but foreign to the Copridæ.

The list of *Rhyppari* at present described amounts to a dozen, but it will no doubt become very much longer. A third of the number are from Borneo, but the distribution is very wide, extending from Sud-Est Island (Louisiade

Archipelago) in the east to Mauritius in the west, and I have even seen (in M. René Oberthür's collection) a species from West Africa. The only mainland species yet recorded is *R. birmanicus*, Fairm.; but *R. sumatrensis*, Fairm., was found by Doherty at Perak, and I describe here another form occurring in the same locality.

*Rhyparus peninsularis*, sp. n.

Niger, opacus, griseo-indutus, modice elongatus; capite lato, 6-cristato; prothorace antice valde dilatato, angulis rotundatis, lateribus medio sat dilatatis, deinde contractis, angulis posticis obtusis, disco 6-carinato, carinis duobus internis leviter sinuatis, medio paulo approximatis, duobus intermediis late interruptis, externis integris, intervallis medio et externis sparse grosse punctatis, intermediis lævibus; elytris acute costatis, costis suturalibus paulo latoribus, postice regulariter arcuatis, discoidalibus postice abbreviatis, valde incrassatis, callis apicalibus prominentissimis, intervallis grosse biserialim punctatis, lateribus hand parallelis, postice distincte contractis; pygidio longitudin-aliter carinato; corpore subtus sat crebre punctato; tibiis quatuor anterioribus apice valde incurvatis, femoribus intermediis subtus bidentatis.

Long. 6-7 mm.

*Hab.* MALAY PENINSULA, Penang (*Lamb*), Perak (*Doherty*).

I have seen three specimens, of which that from Perak is in M. Oberthür's collection.

The species resembles *R. Saundersi*, Pascoe, and still more another Bornean form which I have seen identified by M. Fairmaire as his *R. approximans*, but which more nearly agrees with the description of *R. denticollis*, and may be distinct from both. *R. peninsularis* is rather larger than either and relatively broader, with its elytra tapering more behind. It differs most obviously in its puncturation, the inner lateral interstices of the pronotum being smooth and the middle and outer interstices thinly strewn with large punctures, whereas the other species named have the pronotum evenly and densely punctured. The punctures upon the elytral interstices are also very large and arranged in not closely serried rows. The elytra are not angulated behind at the suture, as in *R. Saundersi*. *R. sumatrensis*, Fairm., is also a nearly related form, but it is still larger and the pronotum is almost entirely impunctate.

*Rhyparus philippinensis*, sp. n.

Niger, opacus, elongatus, parallelus; capite lato, 6-cristato, cristis duabus frontalibus exiguis; prothorace modice transverso, 6-costato, costis sat crassis, intervallis sat grosse punctatis, costis duabus mediis antice et postice leviter divergentibus, intermediis interruptis, laterum angulis anticis mediisque arcuatim productis; elytrorum costis suturalibus latis, postice regulariter arcuatis, discoidalibus postice interruptis, incrassatis, callis apicalibus prominentibus, interstitiis omnibus sat grosse biserialiter punctatis; pygidio longitudinaliter carinato; corpore subtus sat crebre punctato; femoribus simplicibus, tibiis quatuor anterioribus apice incurvatis.

Long. 5-6.5 mm.

*Hab.* PHILIPPINE ISLANDS.

Four specimens of this species have been in the British Museum since 1845, and M. Oberthür possesses another example. They are almost destitute of the earthy covering usually found in these beetles, but this is probably only due to local or accidental circumstances. The species is similar to the preceding one except in matters of detail. It is rather smaller and more slender, and the prothorax is everywhere rather coarsely punctured, a few punctures being traceable even upon the costæ, which are rather thick. The rows of punctures upon the elytra are rather less coarse than in *R. peninsularis*. The pygidium and underside are as in that species, but the middle femora are not toothed.

*Rhyparus gracilis*, sp. n.

Niger, opacus, elongatus, parallelus; capite modice lato, punctato, medio tumido, minute bituberculato, postice 4-cristato, clypeo obtuse biangulato, medio recto; prothorace postice latitudine ad longitudinem æquali, lateribus antice et medio arcuatim dilatatis, carinis duabus medianis postice lato divergentibus, intermediis vestigiis anticis et posticis ostensis, externis valde sinuatis, intervallis grosse punctatis; elytris ut in *R. philippinense*, sed paulo longioribus, callis apicalibus modice prominentibus; pygidio apice longitudinaliter carinato; corpore subtus crebre punctato; femoribus quatuor anterioribus subtus angulatis, tibiis omnibus apice fortiter incurvatis.

Long. 6.5 mm.

*Hab.* LOUISIADE ARCHIPELAGO, Sud-Est Island.

Three specimens were collected by Mr. Meek in April 1898, one of which has been presented by M. Oberthür to the Museum.

The species closely resembles *R. philippinensis*, but is

larger and still more slenderly proportioned, the thorax, exclusive of the anterior projections, being nearly quadrate. The head is less transverse and less angular than in most of the species, and the frontal tubercles are widely separated from those on the vertex. The thorax is coarsely punctured all over, and its central carinæ are close together in front, begin to diverge before the middle, and are wide apart behind. The second carina on each side is very broadly interrupted. The front and middle femora are broadly but sharply angulated beneath.

The genus *Sybacodes* is closely related to *Rhyparus*, but its form is more normal and, except for the thoracic ridges, almost that of *Atenius*. The only known species, *S. lutulentus*, Fairm., originally described from Burma, has a wide distribution, and I have seen it also from Siam, Kanara, and the Panjab. M. René Oberthür has kindly enabled me to compare our series with the types, and as M. Fairmaire's description is ambiguous and in some respects inaccurate, I have thought it desirable to give a redescription, based upon the fuller materials at my disposal.

*Sybacodes lutulentus*, Fairm.

(‘Notes from the Leyden Museum,’ 1896, pp. 84-85.)

Robustus, griseo-indumentus, subtiliter auropiliferus, clypeo obtuse biangulato, fronte fasciculis duabus aureis ornata; prothorace sat lato, angulis anticis fere rotundatis, posticis exicis, lateribus ante medium lævissime contractis, disco longitudinaliter 6-costato, costis internis duabus fere rectis, externis valde sinuatis, intermediis medio intus fossa parva deflectis, haud interruptis, omnibus breviter auropiliferis; prothorace capiteque irregulariter haud dense punctatis; elytris ad humeros quam prothoracae latioribus, deinde lateribus leviter sat regulariter arcuatis, sutura costisque tribus fortiter, intermediisque quatuor minus elevatis, auropiliferis, interstitiis uniseriatim sat grosse punctatis; pygidio quam longitudinem multo latiore, crebre et grosse punctato, carina longitudinali pilifera; tibiis anticis bidentatis, spina apicale breve ac robusta, tarsis sat brevibus.

Long. 7 mm.

*Hab.* PANJAB, Kangra Valley; S.W. INDIA, Kanara; BURMA, Carin Cheba, Ruby Mines; SIAM, Renong.

This genus has an obvious affinity with *Rhyparus*, but seems to represent a less extreme degree of specialization. The general contour of the head and thorax are the same, but all the elevated portions of the surface are clothed with

fine silky yellow hair. The elytral costæ are twice as numerous as in *Rhyparus*, a secondary series, less elevated, alternating with the primary series. M. Fairmaire's comparison of the elytral sculpture with that of *Sybaæ impressicollis* seems to be due to a misconception, for that genus is very different in every respect and has very broad and flat intervals between the costæ. There are no elytral pits or callosities in *Sybaecodes*, the head is relatively smaller than in *Rhyparus*, the metasternum shorter, and the last abdominal segment longer. M. Fairmaire has described the front tibiæ as three-toothed, but he has evidently mistaken the strong terminal spine for the apical tooth.

LXXI.—*Descriptions of Seven new Species of Notodontidæ from Tropical South America.* By HERBERT DRUCE, F.L.S. &c.

*Hippia undulata*, sp. n.

*Male*.—Head, antennæ, collar, tegulæ, and thorax yellowish brown; thorax and abdomen brown; anal tuft yellowish white; legs yellowish brown. Primaries dark fawn-colour, crossed from the costal margin to the inner margin by a number of fine undulating blackish-brown lines, some of which are broken into small spots; beyond the cell a rather large brown spot: secondaries blackish brown, palest at the base and along the inner margin; the fringe fawn-colour.—*Female* very similar to the male, but paler in colour and with all the markings more distinct.

Expanse, ♂  $1\frac{1}{2}$ , ♀  $1\frac{3}{4}$  inch.

*Hab.* Colombia, Minca, 2000 feet (*H. H. Smith, Mus. Druce*).

*Blera argentata*, sp. n.

*Male*.—Head, antennæ, and palpi black; collar and thorax dark brown; tegulæ silvery grey; abdomen pale greyish brown; the anal segments clothed with black hairs; under-side of thorax and abdomen yellowish brown; the legs dark brown. Primaries dark silvery brown; a line crossing the base of the wing and the discal spot yellowish brown; two narrow waved black lines cross the wing from the costal to the inner margin, the first about the middle, the second